

SEQUENCE LISTING

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KURAHASHI, OSAMU

<120> METHOD OF CONSTRUCTING AMINO ACID PRODUCING BACTERIAL STRAINS, AND
METHOD OF PREPARING AMINO ACIDS BY FERMENTATION WITH THE CONSTRUCTED AMINO ACID
PRODUCING BACTERIAL STRAINS

<130> 0010-1108-0 CONT

<140> 09/577,005

<141> 2000-05-25

<150> PCT/JP99/05175

<151> 1999-09-22

<150> JP 271786/1998

<151> 1998-09-25

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 35 40 45

Glu Ser Ser Pro Glu Arg Ala Arg Tyr Leu Met Leu Arg Leu Leu Glu
 50 55 60

Arg Ala Ser Ala Lys Arg Val Ser Leu Pro Pro Met Thr Ser Thr Asp
 65 70 75 80

Tyr Val Asn Thr Ile Pro Thr Ser Met Glu Pro Glu Phe Pro Gly Asp
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Glu Glu Met Glu Lys Arg Tyr Arg Arg Trp Ile Arg Trp Asn Ala Ala
100 105 110

Ile Met Val His Arg Ala Gln Arg Pro Gly Ile Gly Val Gly Gly His
115 120 125

Ile Ser Thr Tyr Ala Gly Ala Ala Pro Leu Tyr Glu Val Gly Phe Asn
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His Phe Phe Arg Gly Lys Asp His Pro Gly Gly Gly Asp Gln Ile Phe
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Phe Gln Gly His Ala Ser Pro Gly Met Tyr Ala Arg Ala Phe Met Glu
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Gly Arg Leu Ser Glu Asp Asp Leu Asp Gly Phe Arg Gln Glu Val Ser
180 185 190

Arg Glu Gln Gly Gly Ile Pro Ser Tyr Pro His Pro His Gly Met Lys
195 200 205

Asp Phe Trp Glu Phe Pro Thr Val Ser Met Gly Leu Gly Pro Met Asp
210 215 220

Ala Ile Tyr Gln Ala Arg Phe Asn Arg Tyr Leu Glu Asn Arg Gly Ile
225 230 235 240

Lys Asp Thr Ser Asp Gln His Val Trp Ala Phe Leu Gly Asp Gly Glu
245 250 255

Met Asp Glu Pro Glu Ser Arg Gly Leu Ile Gln Gln Ala Ala Leu Asn
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Asp Gly Pro Val Arg Gly Asn Thr Lys Ile Ile Gln Glu Leu Glu Ser
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Phe Phe Arg Gly Ala Gly Trp Ser Val Ile Lys Val Val Trp Gly Arg
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Glu Trp Asp Glu Leu Leu Glu Lys Asp Gln Asp Gly Ala Leu Val Glu
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Ile Met Asn Asn Thr Ser Asp Gly Asp Tyr Gln Thr Phe Lys Ala Asn
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Asp Gly Ala Tyr Val Arg Glu His Phe Phe Gly Arg Asp Pro Arg Thr
 355 360 365

Ala Lys Leu Val Glu Asn Met Thr Asp Glu Glu Ile Trp Lys Leu Pro
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Arg Gly Gly His Asp Tyr Arg Lys Val Tyr Ala Ala Tyr Lys Arg Ala
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Leu Glu Thr Lys Asp Arg Pro Thr Val Ile Leu Ala His Thr Ile Lys
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Gly Tyr Gly Leu Gly His Asn Phe Glu Gly Arg Asn Ala Thr His Gln
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Met Lys Lys Leu Thr Leu Asp Asp Leu Lys Leu Phe Arg Asp Lys Gln
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Gly Ile Pro Ile Thr Asp Glu Gln Leu Glu Lys Asp Pro Tyr Leu Pro
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Pro Tyr Tyr His Pro Gly Glu Asp Ala Pro Glu Ile Lys Tyr Met Lys
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Glu Arg Arg Ala Ala Leu Gly Gly Tyr Leu Pro Glu Arg Arg Glu Asn
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Tyr Asp Pro Ile Gln Val Pro Pro Leu Asp Lys Leu Arg Ser Val Arg
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Lys Gly Ser Gly Lys Gln Gln Ile Ala Thr Thr Met Ala Thr Val Arg
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Thr Phe Lys Glu Leu Met Arg Asp Lys Gly Leu Ala Asp Arg Leu Val
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Pro Ile Ile Pro Asp Glu Ala Arg Thr Phe Gly Leu Asp Ser Trp Phe
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Pro Thr Leu Lys Ile Tyr Asn Pro His Gly Gln Asn Tyr Val Pro Val
565 570 575

Asp His Asp Leu Met Leu Ser Tyr Arg Glu Ala Pro Glu Gly Gln Ile
580 585 590

Leu His Glu Gly Ile Asn Glu Ala Gly Ser Val Ala Ser Phe Ile Ala
595 600 605

Ala Gly Thr Ser Tyr Ala Thr His Gly Lys Ala Met Ile Pro Leu Tyr
610 615 620

Ile Phe Tyr Ser Met Phe Gly Phe Gln Arg Thr Gly Asp Ser Ile Trp
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645 650 655

Gly Arg Thr Thr Leu Thr Gly Glu Gly Leu Gln His Met Asp Gly His
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Ser Pro Val Leu Ala Ser Thr Asn Glu Gly Val Glu Thr Tyr Asp Pro
675 680 685

Ser Phe Ala Tyr Glu Ile Ala His Leu Val His Arg Gly Ile Asp Arg
690 695 700

Met Tyr Gly Pro Gly Lys Gly Glu Asp Val Ile Tyr Tyr Ile Thr Ile
705 710 715 720

Tyr Asn Glu Pro Thr Pro Gln Pro Ala Glu Pro Glu Gly Leu Asp Val
725 730 735

Glu Gly Leu His Lys Gly Ile Tyr Leu Tyr Ser Arg Gly Glu Gly Thr
740 745 750

Gly His Glu Ala Asn Ile Leu Ala Ser Gly Val Gly Met Gln Trp Ala
755 760 765

Leu Lys Ala Ala Ser Ile Leu Glu Ala Asp Tyr Gly Val Arg Ala Asn
770 775 780

Ile Tyr Ser Ala Thr Ser Trp Val Asn Leu Ala Arg Asp Gly Ala Ala
785 790 795 800

Arg Asn Lys Ala Gln Leu Arg Asn Pro Gly Ala Asp Ala Gly Glu Ala
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Phe Val Thr Thr Gln Leu Lys Gln Thr Ser Gly Pro Tyr Val Ala Val
820 825 830

Ser Asp Phe Ser Thr Asp Leu Pro Asn Gln Ile Arg Glu Trp Val Pro
835 840 845

Gly Asp Tyr Thr Val Leu Gly Ala Asp Gly Phe Gly Phe Ser Asp Thr
850 855 860

Arg Pro Ala Ala Arg Arg Phe Phe Asn Ile Asp Ala Glu Ser Ile Val
865 870 875 880

Val Ala Val Leu Asn Ser Leu Ala Arg Glu Gly Lys Ile Asp Val Ser
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